UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450

## NOTICE OF ALLOWANCE AND FEE(S) DUE

25096 7590 PERKINS COIE LLP PATENT-SEA P.O. BOX 1247 SEATTLE, WA 98111-1247 11/14/2008

1714/2008

EXAMINER

PHAN, MAN U

ART LINIT PAPER NUMBER

2419

DATE MAILED: 11/14/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/824,440	04/15/2004	Kevin Lin	320528617US1	6295	

TITLE OF INVENTION: CONTROLLING METHOD AND DEVICE FOR DATA TRANSMISSION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	02/17/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THE APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

	ed below or directed otl	nerwise in Block 1, by (							
CURRENT CORRESPOND	ENCE ADDRESS (Note: Use B	lock I for any change of address)		Note Fee( pape have	e: A certificate of s) Transmittal. The rs. Each additiona e its own certificate	mailing is certif I paper of ma	g can only be used for icate cannot be used in the such as an assignmental iling or transmission.	or dome for any ent or fe	estic mailings of the other accompanying ormal drawing, must
PERKINS CO PATENT-SEA P.O. BOX 1247	IE LLP	V2008		I her State addr trans	Cer reby certify that the es Postal Service vessed to the Mail smitted to the USP	tificate is Fec( vith sul I Stop TO (57	e of Mailing or Trans s) Transmittal is bein ficient postage for fir ISSUE FEE address 1) 273-2885, on the c	mission g depos st class above, late ind	n ited with the United mail in an envelope , or being facsimile icated below.
SEATTLE, WA	. 98111-1247								(Depositor's name)
									(Signature)
				L					(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CON	FIRMATION NO.
10/824,440	04/15/2004		Kevin Lin				320528617US1		6295
TITLE OF INVENTION	: CONTROLLING ME	THOD AND DEVICE FO	OR DATA TRANSMI	ssio					
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE I	OUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE		DATE DUE
nonprovisional	NO	\$1510	\$300		\$0		\$1810		02/17/2009
EXAM		ART UNIT	CLASS-SUBCLASS	S					
PHAN,	MAN U ence address or indicatio	2419	370-258000		atent front page, lis				
CFR 1.363).  Change of corresp Address form PTO/SI  "Fee Address" ind PTO/SIB/47; Rev 03-t Number is required.									
PLEASE NOTE: Un recordation as set for (A) NAME OF ASSI	less an assignee is ident th in 37 CFR 3.11. Comp GNEE	A TO BE PRINTED ON iffed below, no assignee pletion of this form is NO	data will appear on t T a substitute for filin (B) RESIDENCE: (6	he pa g an	atent. If an assign assignment. and STATE OR C	OUNT	TRY)		
Please check the appropr	riate assignee category or	categories (will not be p	rinted on the patent):		Individual 🚨 Co	orporati	ion or other private gr	oup ent	ity Government
Advance Order -	No small entity discount p	permitted)	b. Payment of Fee(s):  A check is enclor Payment by cred The Director is hoverpayment, to	sed. it can ereby	d. Form PTO-2038	is atta	sched. required fee(s), any de	ficienc	
<ol> <li>Change in Entity Sta</li> <li>a. Applicant claim</li> </ol>	itus (from status indicate is SMALL ENTITY stati		☐ b. Apolicant is no	o lon	ser claiming SMA	LEN	FITY status. See 37 C	FR 1.27	7(g)(2).
		uired) will not be accepte tes Patent and Trademark							
		nest aren and frademar	Conice.						
Authorized Signature					Date				
Typed or printed nam			Registration N						
This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this bu /irginia 22313-1450. DO 313-1450.	ER 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	on is required to obtain 1.14. This collection of depending upon the the Chief Information C COMPLETED FORM	n or r is est indiv Office IS TO	etain a benefit by t imated to take 12 idual case. Any co r, U.S. Patent and D THIS ADDRESS	he pub minuter mmen Trader S. SEN	lic which is to file (an s to complete, including is on the amount of ti- nark Office, U.S. Dep D TO: Commissioner	d by the ng gathe me you artment for Pate	USPTO to process) ering, preparing, and require to complete t of Commerce, P.O. ents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



## UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

COMMISSIONER FOR PATENTS P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/824,440		04/15/2004	Kevin Lin	320528617US1	6295		
25096	7590	11/14/2008		EXAM	UNER		
PERKINS COIE LLP			PHAN, MAN U				
PATENT-SEA				ART UNIT	PAPER NUMBER		
	P.O. BOX 1247 SEATTLE, WA 98111-1247			2419 DATE MAILED: 11/14/2008			

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 734 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 734 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

### Application No. Applicant(s) 10/824 440 LIN ET AL. Notice of Allowability Examiner Art Unit Man Phan 2419 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the communications filed 8/28/2008. The allowed claim(s) is/are 1-13, 15, 17-19 (claims are renumbered as 1-17 respectively). 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) \( \subseteq \text{Some\* c} \subseteq \subseteq \text{None of the:} \) a) $\square$ All 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. T Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other .

Application/Control Number: 10/824,440 Page 2

Art Unit: 2419

## Reasons for allowance

- This communication is in response to applicant's 08/28/2008 amendment in the application of Lin et al. for a "Controlling method and device for data transmission" filed 04/15/2004. This application claims priority from Provisional application 60/495,116 filed August 15, 2003. This application is a Request for Continued Examination (RCE) under C.F.R. 1.114 filed on August 28, 2008. The amendment and response filed 08/28/2008 has been entered and made of record. Claims 14, 16 have been canceled per applicant's request, claims 1-13, 17 have been amended, and claims 18-19 have been added. The claims have been amended to better point out and more distinctly claim subject matter comprising the invention.
- Claims 1-13, 15, 17-19 are allowable as evident by applicant's amendment (The claims
  are renumbered as 1-17 respectively).
- 3. The following is an examiner's statement of reasons for allowance: The closest prior art of record fails to disclose or suggest wherein parts of data processing procedures of the first transmission channel during the interval comprising: caching and decoding data in the first transmission channel while the data transmitted from the first transmission channel to the system bus; encoding and storing data to a storage media while the data transmitted from the system bus to the first transmission channel; utilizing the first transmission channel for caching a first source data when a first command issued by the command processor is read/write; and utilizing the second transmission channel for caching a second source data when a second command issued by the command processor is write/read, wherein the second command performed after the first

Art Unit: 2419

command; wherein if the first processing procedures comprising a data decoding, the pair of pipe indices comprising: a write pipe index for indicating amount of cached data in a corresponding transmission channel with the first processing procedures; a decode pipe index for indicating amount of decoded data; and a host-pipe sector data send index for indicating a mount of data sent from the corresponding transmission channel to a command processor; wherein if the first processing procedures comprising a data encoding, the pair of pipe indices comprising: a host-pipe sector data get index for indicating amount of data sent from a command processor to corresponding transmission channel; an encode pipe index for indicating amount of encoded data; and a record pipe index for indicating amount of encoded data sent from corresponding transmission channel to a storage medium, as specifically recited in the claims.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance"

#### Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Man U. Phan whose telephone number is (571) 272-3149. The examiner can normally be reached Monday through Friday from 6:00 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel, can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 2419

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Group receptionist whose telephone number is (571) 272-2600.

6. Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have any questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at toll free 1-866-217-9197.

Mphan

Nov. 06, 2008

/Man Phan/

Primary Examiner, Art Unit 2419



Application/Control No.	Applicant(s)/Patent under Reexamination				
10/824,440	LIN ET AL.				
Examiner	Art Unit				
Man Phan	2419				